

IN THE CLAIMS:

Please amend claims 1, 4, 12, 15, 18, 19, 27 and 28 as indicated in the following.

Please cancel claims 2, 3, 13, 14 and 26 without prejudice as indicated in the following.

Claims Listing:

1. (Currently Amended) A method comprising:
receiving a first request to access data from a first memory device;
preparing the first request for the data for access through the first memory device;
providing a second request to access the data from a second memory device, wherein the
second request is provided concurrently with the step of preparing the first
request;
receiving a first notification that the data associated with the first request is available
from the second memory device; and
~~terminating the first request,~~discarding data received from the first memory device in
response to the first notification, wherein the discarded data is associated with the
first request.
2. (Canceled)
3. (Canceled)
4. (Currently Amended) The method as in ~~Claim 3~~Claim 1, wherein the data is ~~terminated~~
discarded at a memory controller.
5. (Original) The method as in Claim 1, wherein the data in the second memory device is
coherent with the data in the first memory device.
6. (Original) The method as in Claim 1, wherein the first memory device includes random
access memory.

7. (Original) The method as in Claim 1, wherein the second memory device includes cache memory.

8. (Original) The method as in Claim 1, wherein a memory controller associated with the first memory device terminates the memory request in response to the termination request.

9. (Original) The method as in Claim 1, wherein the first request is generated by a client on a system bus.

10. (Original) The method as in Claim 1, wherein the memory request includes a multiple target memory request.

11. (Previously Presented) The method as in Claim 1, wherein providing a second request includes:

providing the second request to a bus interface unit; and
wherein the bus interface unit is coupled to the second memory device.

12. (Currently Amended) A method comprising:

receiving a first request to read data from a memory device;

preparing a second request, based upon the first request, for transmission to the memory device;

delivering a third request, based upon the first request, for data from a cache memory, the third request being delivered concurrently with the preparation of the second request;

providing, in response to the first request, data from the cache memory when the data stored in the cache memory is coherent with the data stored in the memory device;

discarding data received from the memory device when data is provided from the cache memory, wherein the discarded data is associated with the second
request~~terminating the second request when the data is provided from the cache~~
memory; and

providing, in response to the first request, data from the memory device when the data stored in the cache memory is not coherent with the data stored in the memory device.

13. (Canceled)

14. (Canceled)

15. (Currently Amended) The method as in Claim 12, wherein a memory controller associated with the memory device is used for ~~terminating the second request~~ discarding the data.

16. (Original) The method as in Claim 12, wherein the first request is generated by a bus client.

17. (Original) The method as in Claim 15, wherein the client is a multiple target memory request.

18. (Original) The method as in Claim 12, wherein delivering a third request includes: delivering the third request to a bus interface; and wherein the bus interface unit is coupled to the cache memory.

19. (Currently Amended) A system comprising:

a data processor having:

an input/output buffer; and

cache memory to store data associated with a memory device;

a bus interface unit having a first input/output buffer coupled to the input/output buffer of the data processor, a second input/output buffer and a third input/output buffer, said bus interface unit to:

determine a validity of data in said cache memory during a cache access; and

provide a notification indicating data in said cache memory is valid, wherein said notification identifies a first request;

said memory device having an input/output buffer coupled, said memory device to provide data associated with a first request;

a bus controller having a first input/output buffer coupled to the input/output buffer of the data processor, a second input/output buffer coupled to the second input/output buffer of the bus interface unit and a third input/output buffer, said bus controller to:

receive said first request to access data in said memory device, wherein said request is received from a bus client;

provide said first request to the memory controller;

receive said data associated with said first request from said bus interface unit;

the memory controller having a first input/output buffer coupled to the third input/output buffer of the bus controller, a second input/output buffer coupled to the third input/output buffer of the bus interface unit and a third input/output buffer coupled to the input/output buffer of the memory device, said memory controller to:

provide access to said memory device;

receive said first request from said bus controller;

prepare said first request to access data from said memory device;

provide a second request to said bus interface unit, wherein said second request is to access data associated with said first request from said cache memory;

receive said notification from said bus interface unit;

generate a second identifier using said notification;

store said second identifier as part of a kill list, wherein said kill list identifies requests to be terminated; and

terminate the first request, ~~in response to the receipt of said notification~~ based on the kill list.

20. (Previously Presented) The system as in Claim 19, wherein said bus interface unit is further used to synchronize said cache memory to said memory device.

21. (Previously Presented) The system as in Claim 20, wherein said bus interface unit is further used to determine a coherency between said cache memory and said memory device.

22. (Previously Presented) The system as in Claim 21, wherein the coherency is dependent on whether said memory device has been written to prior to a synchronization of said cache memory with said memory device.

23. (Original) The system as in Claim 19, wherein said bus controller includes a peripheral component interconnect bus controller.

24. (Original) The system as in Claim 19, wherein said memory device includes random access memory.

25. (Previously Presented) The system as in Claim 19, wherein said memory controller is further used to:

- assign a first identifier to said first request; and
- identify said first request from a plurality of pending requests using said first identifier.

26. (Canceled)

27. (Currently Amended) The system as in Claim 19, wherein said memory controller to terminate the first request is further to ~~terminate~~discard data received from said memory device, wherein said data is associated with said first request.

28. (Currently Amended) A system comprising:

- a cache memory;

- a memory device; and

- a memory controller configured to:

- provide access to said memory device;

- receive a first request to access data in said memory device;

- prepare said first request to access data from said memory device;

provide a second request to access data associated with said first request from said cache memory;
receive a notification indicating data in said cache memory is valid, wherein said notification identifies the first request; and
~~terminate the first request,~~discard data being received in response to the receipt of said notification, wherein the data is associated with the first request.